The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An exercise training apparatus comprising:

a support frame having a front support member and a rear mounting assembly;

a bicycle frame having a rotatable front fork and a rear fork, the front and rear forks being capable of detachably mounting ground engaging wheels thereon, the front and rear forks being detachably coupled to the respective front support member and rear mounting assembly of the support frame;

a flywheel rotatably coupled to the rear mounting assembly of the support frame;

a transmission system including a rear sprocket coupled to the flywheel and a user operable crank assembly, the crank assembly coupled to the bicycle frame and operably connected to the rear sprocket through a flexible drive element, and

a magnetic field generation source coupled to the rear mounting assembly of the support frame, a portion of the flywheel passing through the magnetic field source.

2. The apparatus of Claim 1, wherein the portion of the flywheel passing through the magnetic field source includes a nonmagnetic, electrically conductive ring.

3. The apparatus of Claim 2, wherein the flywheel includes a plurality of radial segments that form the nonmagnetic, electrically conductive ring.

4. The apparatus of Claim 1, wherein the flywheel extends between the rear forks of the bicycle frame.

5. The apparatus of Claim 1, wherein resistance is created against the rotation of the crank assembly when the flywheel passes through a magnetic field generated by the magnetic field generation source.

6. An exercise training apparatus comprising:

a support frame for supporting a bicycle frame, the bicycle frame having a transmission including a flexible drive element; and

a resistance generation unit for creating resistance against the transmission, the resistance generation unit coupled to the support frame;

the support frame including a chain tensioning device for selectively tension the flexible drive element.

7. The apparatus of Claim 6, wherein the chain tensioning device comprises:

a base; (150)

a support member (154) projecting upwardly from the base which supports the flexible drive element;

an elongate deflection member (152) having a first end secured to the support member and a second end secured to the bicycle frame; and

a linear actuator (190) mounted on the support member, an end of the linear actuator engagable with the second end of the deflection member.

8. The apparatus of Claim 7, wherein the resistance unit includes a flywheel rotatably coupled to the support member of the chain tensioning device; and

a magnetic field generation source coupled to the base of the chain tensioning device, a portion of the flywheel passing through the magnetic field source to create the resistance against the transmission.

9. The apparatus of Claim 8, wherein the magnetic field source is an electromagnet.

10. The apparatus of Claim 6, the support frame further comprising an adjustment mechanism for selectively adjusting the wheel base of the bicycle frame.

11. The apparatus of Claim 7, wherein linear translation of the linear actuator causes the end of the linear actuator to engage with the deflection member so as to bend the deflection member away from the support to selectively tension the flexible drive element.

12. A chain tensioning device for an exercise training apparatus having a frame and a resistance transmission including a flexible drive element, comprising:

a base;

a support member projecting upwardly from the base which supports the flexible drive element;

an elongate deflection member having a first end secured to the support member and a second end secured to the frame; and

a linear actuator mounted on the support member, an end of the linear actuator engagable with the second end of the deflection member;

wherein linear translation of the linear actuator causes the end of the linear actuator to engage with the deflection member so as to bend the deflection member away from the support member to selectively tension the flexible drive element.

13. The device of Claim 12, wherein the linear actuator is a screw.

14. The device of Claim 12, further comprising an anchor block coupled to the base in spaced relation from the support member to form a gap, the bottom end of the deflection member restrained within the gap.

15. In an exercise training device having a resistance unit and a support frame, the resistance unit including a flywheel and a magnetic field generation source, the magnetic generation source coupled to the support frame, the support frame adapted to receive a bicycle frame, the support frame including a front support member and a rear mounting assembly, the front support member and the rear mounting assembly adapted for receiving a respective front fork and a rear fork of the bicycle frame, the bicycle frame having a transmission system including a rear sprocket and pedals, the pedals operably connected to the rear sprocket through a flexible drive element, wherein the flywheel comprises:

a circular body including an outer peripheral flange and a hub section, the hub section having a centrally located bore for receiving an axle, the circular body adapted to be connected to the rear mounting assembly through the axle; and

a plurality of radial segments of a non-magnetic, conductive material coupled to the outer peripheral flange;

wherein the flywheel is adapted to be drivingly connectable to the drive system, the rotation of the pedals causing a portion of the radial segments to pass through the magnetic field generation source resulting in a resistance against the rotation of the pedals.

16. A flywheel for use in an exercise resistance trainer, comprising:

a circular body including an outer peripheral flange and a hub section, the hub section having a centrally located bore for receiving an axle, the circular body adapted to be connected to the exercise resistance trainer through the axle; and

a plurality of radial segments of a non-magnetic, conductive material removably coupled to the outer peripheral flange;

wherein the flywheel is adapted to be connected to a transmission system for rotating the flywheel through a magnetic source.

17. The flywheel of Claim 16, wherein the circular body is comprised of a solid disk.

18. The flywheel of Claim 16, wherein the plurality of radial segments are disposed adjacent to one another as the plurality of segments extends around the outer peripheral flange to form an annular segmented ring.

19. The flywheel of Claim 18, wherein the segments are disposed adjacent to each other in spaced relation to provide a gap therebetween.

20. A flywheel for use in an exercise resistance trainer, the trainer having a support frame adapted to be connected to a bicycle frame having a transmission system, the transmission system including pedals and a rear sprocket connectable to the flywheel, the pedals operably connected to the rear sprocket through a flexible drive element, the flywheel comprising:

a circular body including an outer peripheral flange and a hub section, the hub section having a centrally located bore for receiving an axle, the circular body adapted to be connected to the support frame through the axle; and

a plurality of radial segments of a non-magnetic, conductive material coupled to the outer peripheral flange;

wherein the flywheel is adapted to be connected to the transmission system.